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ABSTRACT

In 1980, the Office of Continuing Education and Public Service at the University of Illinois at Urbana-Champaign acquired a W. K. Kellogg Foundation grant to establish a 4-year model Community Information and Education Service (CIES). Working with the university's Cooperative Extension Service and five community colleges, CIES initially focused on five major issues: land resource utilization, water quality and availability, local government and administration, rural transportation and road maintenance, and rural crime. CIES also intended to help individuals and communities master the demands of the emerging technical society and in that context sponsored a 1-day symposium in October 1983 focusing on the issues and implications for Central Illinois of changing technology in the workplace. Despite statistics, discussions, and personal experience, most attendees were uncertain whether current socioeconomic phenomena and attitudes represented a transient period or a sustained era of adaptation. In the future, CIES will continue to help promote the ability to deal with emerging social patterns by concentrating more efforts on continuing education of target groups such as lay board members and civic officials, adding an applied research and development component, and attempting to build temporary coalitions to deal with emergent conditions. The symposium schedule is included. (SB)

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TECHNOLOGICAL CHANGE AND RURAL DEVELOPMENT:
A CASE EXAMPLE FROM ILLINOIS

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Technological Change and Rural Development:

A Case Example From Illinois

Background

In 1980, the Office of Continuing Education and Public Service, University of Illinois at Urbana-Champaign, received a grant from the W. K. Kellogg Foundation for the purpose of establishing a four-year model "Community Information and Education Service" (CIES). Other units of the campus involved in this endeavor are the Cooperative Extension Service and thirty-one of its county affiliates. Five community colleges also participate. The map in Figure 1, p. 2, captures this arrangement.

Initially, five issues were given top priority.

1. Land resource utilization
2. Water quality and availability
3. Local government and administration
4. Rural transportation and road maintenance
5. Rural crime

However, the recession of 1981-82, which hit Illinois particularly hard, quickly pushed matters concerning economic development to the forefront. The same forces brought additional pressures to bear on the primary objectives of CIES. They include:

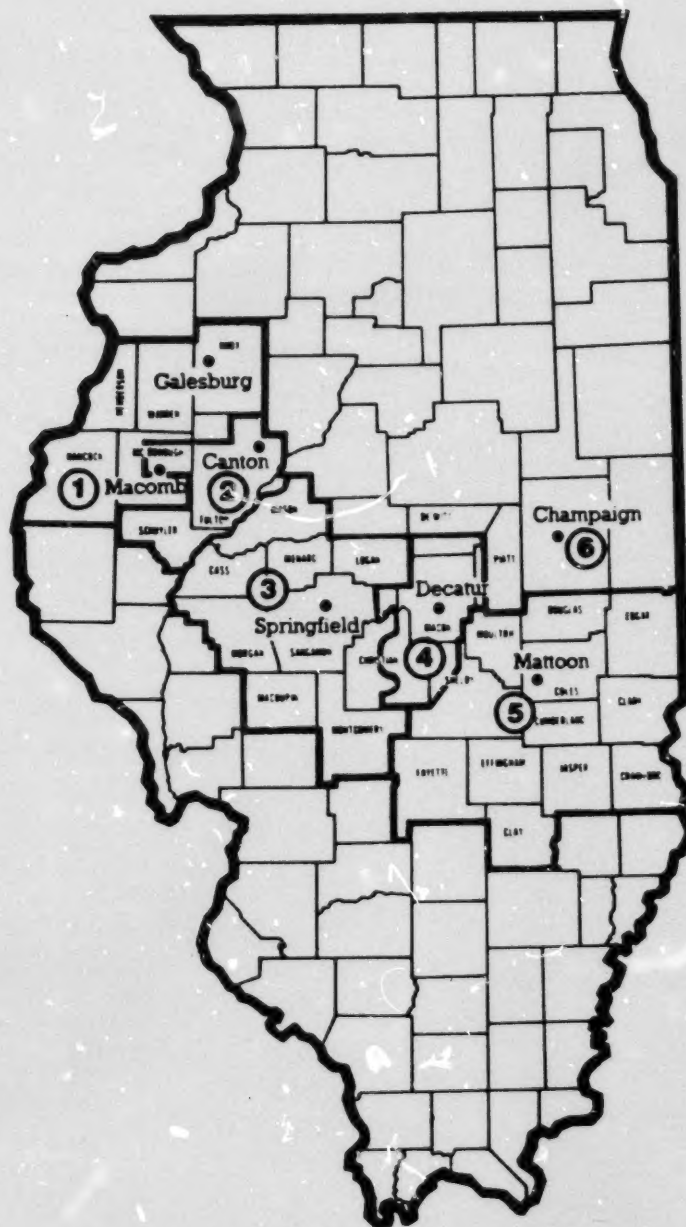
"to provide opportunities for community leaders to explore complex issues through discussion and other educational means";

"to provide assistance to community leaders on locating and using technical resources that are available to them."

FIGURE 1

CIES Service Area

1. Carl Sandburg District
2. Spoon River District
3. Lincoln Land District
4. Richland District
5. Lake Land District
6. CIES Administrative Offices



It is now apparent that adequate responses to either or both objectives will sorely test conventional approaches to adult education, to the dissemination of information.

Context

Illinois is a diverse state and is marked by an extreme degree of fragmentation in the realm of governance. For example, it has over 1000 school districts, a number found in only three other states, and 6000 plus special-purpose taxing bodies, a factor placing it in the number one position nationally.¹ In some important ways, Illinois mirrors national trends as well as social-political-economic phenomena common to its Midwestern neighbors. An Oregon observer (Smith, 1983:1) recently offered the following assessment.

As one of the megastates, Illinois reflects national trends. The state, with its diverse population, variety of places in which to live--ranging from small hamlets to a major metropolis, and mixture of economic activities, serves as a microcosm of the country at large. The need to redraw legislative districts has focused some popular attention on the fact that Illinois and other Midwestern and some Northeastern states did not grow as fast as the rest of the nation during the 1970s.

As Figure 1 indicates, CIES operates throughout an area located approximately in the middle of the state. This section is marked by farms primarily devoted to grain- or livestock-production and by a handful of industrial cities. The latter range from Peoria (125,000) and Decatur (95,000) to Canton, Paris, and Galesburg, all of which are under 10,000 population. A factor common to these sites, large or small, is the severe

impact of the recession coupled with the introduction of new technology into the work place.²

The effects of technological change already are clearly evident on the farms and in the small communities which once functioned as market towns for rural residents. Today, many of those communities have lost their economic purpose; people may continue to reside in them but they refer to regional sites for goods and services. The area around Urbana-Champaign graphically portrays this phenomenon, an outcome anticipated in the writings of Rosenberg and Moynihan.

Rosenberg examined the types of agriculture produced by the interaction of technology with regional differences in the United States (1976: 97-98).

Midwestern U. S. agriculture has provided a radically different experience. The pattern of agricultural activity in the American midwest was of such a nature that it developed a high degree of commercial and technical sophistication on the part of the labor inputs. Much of the explanation lies in the fact that this was an agriculture . . . which required a highly efficient and sophisticated system of managerial decision-making. . . .

The midwestern farm is often a fairly elaborate enterprise where the decision-maker must be close to the detailed day to day operations of the farm and which require a familiarity with market phenomena and a wide range of technical skills.

Moynihan pointed to second- and third-order effects of major interventions (1970: 93-94). Referring to the interstate highway program as producing "truly transcendent continental consequences," he explained:³

This was a program which the twenty-first century will almost certainly judge to have had more influence on the shape and development of American cities, the distribution of population within metropolitan areas and across the nation as a whole, the location of industry and various kinds of employment opportunities (and, through all these, immense influence on race relations and the welfare of black Americans) than any initiative of the middle third of the twentieth century. . . . It has been, it is, the largest public works program in history. Activities such as urban renewal, public housing, community development, and the like are reduced to mere digressions when compared to the extraordinary impact of the highway program.

* * *

Had anyone realized what they (Bureau of Public Roads) were in fact doing, the sheer magnitude of the interests they were affecting, it is high impossible to imagine that they would have won acceptance.

Three interstate highways converge on Urbana-Champaign; rural parts of the county are characterized by large-scale, "family farming" operations of 500 acres or more. While the latter have not been immune from problems spawned in the international arena, the twin cities have enjoyed one of the lowest unemployment rates in a state wracked by industrial lay-offs.

Development as a Process of Social Learning

The writer serves on the CIES Evaluation Committee. In addition, he has taken part in some of its programs, either as a participant-observer or by engaging in program transactions.⁴ In his judgment, project accomplishments to date have underscored the gap separating education, broadly

conceived, from constructive action. Dunn (1972: 8) outlined the dilemma a decade ago.

The terms 'growth' and 'development' are often used interchangeably or imprecisely in current literature. Growth implies that an activity system is increasing the scale of its social structure and the quantitative level of its activities. . . . Development implies that an activity system is transformed in the mode of its behavior. Growth is a scale concept and development a behavioral concept. (his italics)

References to transformation and behavioral changes are congruent with contemporary treatments such as The Next American Frontier (Reich, 1983), Megatrends, Ten New Directions Transforming Our Lives (Naisbitt, 1982), Encounters With The Future: A Forecast of Life into the 21st Century (Cetron and O'Toole, 1982). These sources, and others of similar nature, look towards the next century with optimism; but none deals in explicit fashion with short-term problems and possibilities which pose staggering challenges to current forms of life. Drucker (1976: 163) anticipated a prevailing condition.

The most important point about the new demands on our social institutions and the new social issues is not their novelty. Nor is it their difficulty, though some of them will indeed be hard to satisfy. Above all, it is that they are diametrically opposed to the mood, the slogans, the rhetoric, which still dominate the headlines and shape policies today. . . . Our ability and willingness to alter our perception and to accept (these) changes as fundamental, as real, and as accomplished facts will largely determine whether we can master the new social demands and

whether America can shape an effective social policy during the next decade.

CIES's intent is to render assistance in helping individuals and communities "master the new social demands" cited above. A meaningful episode in this regard transpired on October 18, 1983.

A Symposium of Significance

Figure 2, pp. 8-9, provides an overview of the day and a clue as to the issues at stake.

Morning presentations and discussions highlighted negative effects of the state's fragmentation noted earlier: "Why can't we get organized like North Carolina?"⁵--and a sobering film/lecture combination describing the growing impact of computer-driven systems on traditional modes of production.

Unlike many panel discussions, the closing format was lively, volatile at times, and served as a fitting climax to the day's activities.

The union representative was articulate in his grim warnings about the future of organized labor and its members. He was preceded by the director of economic development, who told a woeful tale of how declining job opportunities at Caterpillar were wreaking havoc on the motivation and aspirations of adolescents attending small rural high schools in the surrounding area. Yet when pressed by questions from the floor as to whether we were witnessing a temporary dislocation or a major transformation, the AFL-CIO spokesman indicated the former. So did the John Deere executive. They were reinforced by an emotional statement from a participant, one of the oldest men in attendance and a labor organizer, who vehemently stressed:

FIGURE 2

CHANGING TECHNOLOGY IN THE WORKPLACE
ISSUES AND IMPLICATIONS FOR CENTRAL ILLINOIS

October 18, 1983
Levis Faculty Center
University of Illinois at Urbana-Champaign

8:30 a.m. Registration

9:00 a.m. Opening Remarks

Program Announcements

Daniel Alpert, Director
Center for Advanced Study
University of Illinois at Urbana-Champaign

Nancy Lauts, Program Specialist
Office of Continuing Education and Public
Service
University of Illinois at Urbana-Champaign

9:15 a.m. Changing Technology And The Illinois Economy--Can We Be Ready?

James Anderson
District Manager, Government Relations
Illinois Bell

Presentation and Discussion

10:00 a.m. What Are The New Technologies?

Phillip Jones
Manager, Technology Education
Caterpillar Tractor Company

Presentation and Discussion

11:00 a.m. BREAK

11:20 a.m. Changing Occupations, Skills and Training Needs

Marilyn Flynn
Associate Professor
School of Social Work
University of Illinois at Urbana-Champaign

Jan Staggs
Executive Director
Illinois Occupational Information
Coordinating Committee

FIGURE 2 (continued)

Presentation and Discussion

12:30 p.m.

Lunch

Luncheon Address

Rupert Evans
Professor Emeritus
University of Illinois at Urbana-Champaign

1:45 p.m.

Social and Psychological Impacts of Changing Technology

Vernon Talbott
Associate Professor
Institute of Labor and Industrial Relations
University of Illinois at Urbana-Champaign

Presentation and Discussion

2:30 p.m.

Approaches To The Issues--Changing Roles and Relationships

Dennis Whetstone
Manager
Division of Job Training Programs
Department of Commerce & Community Affairs

James Leach
Associate Professor
Department of Vocational Technical Education
University of Illinois at Urbana-Champaign

Michael Klein
Staff Representative
ALF-CIO Region I

Gordon Millar
Vice President
John Deere and Company

Jim Finch
Director of Economic Development
Illinois Central College

Presentation and Discussion

3:30 p.m.

Program Wrap Up

Closing Comments

Daniel Alpert

4:00 p.m.

Program Adjourned

None of this makes any sense. Just wait until they're working again, have those two cars and a boat. It'll all be ok. Just like it was. You'll see. The good times are coming back.

Adapting

Despite awesome statistics, sophisticated media treatments, profound discussions, and the weight of personal experience, it was apparent that most persons attending the symposium remained very uncertain as to whether we are caught up in a transient period or beginning a sustained, demanding era of adaptation. Reich (1983: 21) views adaptation as "America's next frontier." CIES personnel have already given some thought to future directions.

First, they intend to concentrate more efforts on continuing education of targeted groups, particularly lay board members and civic officials functioning at township, community, and county levels. This modification is very timely because collective bargaining statutes covering all public employees except police and firemen were approved in the last session of the Illinois General Assembly.

Second, a component featuring applied research and development, with an appropriate dissemination thrust, will be added.

Third, attempts will be made to build temporary coalitions as a means of dealing with emergent conditions. Serious consideration also is being given to expansion of the sectional base to a statewide foundation. This move is virtually mandated, if Cooperative Extension is to remain as an active partner.

Granted Reich's judgment that adaptation embodies the next frontier, changes may be in order for many institutions and organizations, because it is likely to be a frontier possessing the necessary ingredients for

arousing highly-charged, dysfunctional behavior. In the past, "progress" and development have been synonymous with exploration and exploitation, ready accessibility of new, tangible resources. What seems to be looming over the horizon is a need for tapping our reservoirs of social and psychic strength. "Failure to adapt," Reich cautions, "will rend the social fabric irreparably." Success in the future, he seems to be telling us, depends on our ability to learn, to understand, to cooperate, and to share--sometimes with those whose values and way of life are strikingly at odds with our own.

CIES represents a step along that path. In its formative stages, the project has honored advice rendered by Robert Solo (1975: 207).

Social alternatives are not given. They must be created. Beyond choice, more fundamental and more distinctively human than choice, is the task of developing the alternatives between which we choose. The essential social process is not of choosing but of learning, and the most important choice is in choosing what to learn.

In common with other enterprises, though, CIES must be ready to confront harsher realities in the name of adaptation. Dunn, whose work was cited earlier, pinpoints the challenge (1972: 9).

Social learning is much involved with changing the 'name of the game.' At root, the learning process is manifest as an . . . exploratory series of experiments in social action.

Notes

¹Illinois has 102 counties and virtually all are further divided into townships. Some of the counties, especially those on the western side of the state, have high concentrations of the elderly, thus complicating problems identified with growth and development.

²Peoria and Decatur were adversely affected by the lengthy strike at Caterpillar; and both are extremely vulnerable to international markets, not only due to Caterpillar's presence but because of their ties to agri-businesses. Canton formerly relied on International Harvester; Paris on Zenith, which moved its plant to Mexico; and Galesburg on the manufacture of marine outboard motors. The Chicago Tribune featured Galesburg's attempts to recover in a November 9th, 1983, edition.

³Hoke (1971) examined the impact of two interstate highways on a small community (population 10,000) and its schools in downstate Illinois. The study employed Moynihan's analysis as a baseline document.

⁴As one illustration, he was involved in the planning and staging of a CIES symposium entitled "The Future of Public School Education in Illinois," October 27, 1983.

⁵The pre-eminence of Governor Hunt in political-economic-educational circles and media attention to the Research Triangle composed of North Carolina's leading institutions of higher education have focused the spotlight on this state.

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